

Title (en)

METHOD FOR PRODUCING A SYNCHRONIZATION SIGNAL for an INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUR ERZEUGUNG EINES SYNCHRONISATIONSSIGNALS FÜR eine Brennkraftmaschine

Title (fr)

PROCEDE POUR PRODUIRE UN SIGNAL DE SYNCHRONISATION DU CYCLE DE FONCTIONNEMENT D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 2232035 A1 20100929 (FR)

Application

EP 08866387 A 20081219

Priority

- EP 2008068005 W 20081219
- FR 0760081 A 20071220

Abstract (en)

[origin: WO2009083492A1] The invention relates to a method for producing a synchronization signal (NOCYL) for a four-stroke internal combustion engine with an odd number of cylinders (C1, C2, C3) using an electronic control system (7), the synchronization signal (NOCYL) making it possible to identify a predetermined instant in the thermodynamic cycle of each of the cylinders of the engine and to determine, from a TDC signal identifying a determined position of each cylinder, and from a signal (Cg, Bn) representing a parameter indicative of the crankshaft dynamics generated by each of the combustions, both generated from information from an engine crankshaft position sensor (22). According to the invention, the method involves the following steps: operating the engine for a given period with ignition in the cylinders at each cylinder turn, so as to produce systematic combustion of the injected fuel; calculating the representative signal (Cg, Bn); comparing the signal (Cg, Bn) against a reference value; resetting the synchronization signal (NOCYL) if the analysis of the comparison indicates that the synchronization signal is incorrectly timed.

IPC 8 full level

F02D 41/06 (2006.01); **F02D 41/34** (2006.01)

CPC (source: EP)

F02D 41/009 (2013.01); **F02D 41/062** (2013.01); **F02D 2041/0092** (2013.01); **F02D 2200/1004** (2013.01); **F02D 2200/1012** (2013.01)

Citation (search report)

See references of WO 2009083492A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

FR 2925593 A1 20090626; FR 2925593 B1 20140516; CN 101952579 A 20110119; CN 101952579 B 20130619; EP 2232035 A1 20100929; EP 2232035 B1 20151125; JP 2011506851 A 20110303; JP 5588877 B2 20140910; RU 2010130261 A 20120127; RU 2504680 C2 20140120; WO 2009083492 A1 20090709

DOCDB simple family (application)

FR 0760081 A 20071220; CN 200880127011 A 20081219; EP 08866387 A 20081219; EP 2008068005 W 20081219; JP 2010538755 A 20081219; RU 2010130261 A 20081219